

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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September 23, 2009

TO: Internal File

THRU: Steve Christensen, Lead *SKC*

FROM: Ingrid Wieser, Environmental Scientist II *WW*

RE: Add Degas Well G-29, Canyon Fuel Company, Dugout Canyon Mine,  
C/007/0039, Task #3400

### SUMMARY:

On September 3, 2009 the Division received an application from Canyon Fuel Company to add Degas Well G-29, (also referred to as DUG-02) to the Dugout Canyon Mining and Reclamation Plan. Canyon Fuel Company submitted an archeological report as part of a previous task and has received approval from the State Historic Preservation Office.

If approved, the amendment will add two acres to the permit disturbed area.

The amendment is recommended for approval.

### TECHNICAL ANALYSIS:

## ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

## HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

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**Analysis:**

The permittee indicated that the cultural resource report (SPUT-577) has been completed and submitted as part of a previous amendment. The report is located in the confidential binder and has received concurrence from the State Historic Preservation Office. Site G-29 is also referred to as DUG-02. \*(See attachment 3-1 page 2). DUG-02 or G-29 area was surveyed within the "DUG-02, DUG-05 Block" referred to in the SPUT 577 resource report. Two isolated non-eligible resources were found, IF 1 and IF 2. The surveyors concluded that the drill sites will have "no effect" on cultural resources.

**Findings:**

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

**VEGETATION RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.19; R645-301-320.

**Analysis:**

A vegetation inventory of De-gas drill sites G-25, G-26, G-29 and associated reference areas is located in attachment 3-1. The report was prepared by Dr. Patrick Collins of Mt. Nebo Scientific in October 2008. Total living cover, Woody species density, photographs and Diversity data were collected for the drill sites.

Degas site G-29 was characterized by a sagebrush/grass community with scattered pinyon pine, Utah juniper and Douglas fir trees. The total living cover of this site was estimated at 67% comprised of mainly shrubs with few forbs and grasses. Total woody species density was 3,538 individuals per acre.

The reference area for G-29 is the Mountain Brush/Sagebrush/Snowberry reference area shown on figure 3-1. The total living cover of the reference area was 64.5%. Woody species density was 5,137 plants per acre.

According to the statistical comparison between vegetation of site G-29 and the reference area, there is no significant difference between the two sites. All parameters for the reference area are greater than the proposed drill site.

Also located in attachment 3-1 is a vegetation production estimate completed by Mr. Dean Stacy of the NRCS. According to the letter, G-29 did not appear to be previously disturbed and had an estimate production of 1800 pounds per acre.

**Findings:**

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

**FISH AND WILDLIFE RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 784.21; R645-301-322.

**Analysis:**

Fish and wildlife information can be found in chapter 3 of the M&RP and chapter 3 of the Methane degas amendment. Plate 3-2 depicts deer and elk habitat in and adjacent to the permit area.

No raptor nests were found near the proposed well pad area according to annual surveys between 2003 and 2008. Tony Wright of DWR suggested that future goshawk surveys be conducted in portions of section 21 and 17 if a disturbance was planned. The G-29 proposed well site is located in section 29.

A pond identified as an important habitat for bats in the area is located over 1 mile from the proposed drill site.

**Findings:**

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

**OPERATION PLAN**

**FISH AND WILDLIFE INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

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**Analysis:****Protection and Enhancement Plan**

The wells will be in operation after July 15 to avoid any disturbances to wildlife during critical life periods. In the summer of 2009, several snags were marked within the permit area so that they could remain as habitat for Northern Saw Whet Owls.

**Endangered and Threatened Species**

A threatened and endangered plant and animal species survey was conducted within and adjacent to the G-29 drill area. The report is located on page 20 of the vegetation inventory by Pat Collins in attachment 3-1 and attachment 3-2. The report revealed that only one potential sensitive species could be located in the project area, Canyon vetch. Dr. Collins surveyed the area for Canyon vetch. No rare, endemic threatened or endangered or sensitive species were found in the project area.

Attachment 3-2 includes a letter from Dr. Patrick Collins referring to TES plant species in the project area. Dr. Collins concluded that no TES plant or animal species would be affected by the drill site.

**Bald and Golden Eagles**

Page 3-6 of the approved M&RP states that a spring raptor survey will take place in the immediate area of each well pad that is in operation. No nests have been identified in the area of G-29 in previous raptor studies conducted annually between 2003 and 2008.

**Wetlands and Habitats of Unusually High Value for Fish and Wildlife**

No wetlands exist within the proposed drill pad area. Deer and elk habitat is present but drilling will not begin until after July 15 to avoid critical life periods. The drill pad should not be a major disturbance to deer or elk.

**Findings:**

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

## RECLAMATION PLAN

### POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

#### **Analysis:**

Page 4-6 of Chapter 4 of the approved M&RP states that the postmining land use of all degas and mine areas will be livestock and wildlife grazing and other uses as dictated by the land owner. The land owner is Milton and Ardith Thayn trust. A letter from the owner allowing the degas wells is located in attachment 4-2.

#### **Findings:**

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

### REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

#### **Analysis:**

##### **Revegetation: General Requirements**

Revegetation information can be found in the Methane degasification amendment in chapter 3 on page 3-16. The permittee has committed to fencing the well sites during reclamation until bond release to discourage wildlife and livestock from grazing the reclaimed areas.

##### **Revegetation: Timing**

The previously approved reclamation timetable is shown in Figure 5-26 and a monitoring schedule is found in Chapter 3 table 3-3.

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**Revegetation: Mulching and Other Soil Stabilizing Practices**

Vegetation will be used as immediate and long term stabilization of the site. The seed mix will be incorporated with wood fiber mulch at 2000 pounds per acre by hydroseeding or broadcast seeding.

**Revegetation: Standards For Success**

Vegetation success standards will be measured by comparing the vegetation to the reference area standards. The reference area for the site is the Mountain Brush/Sagebrush/Snowberry reference area.

**Findings:**

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

**RECOMMENDATIONS:**

The amendment is recommended for approval.